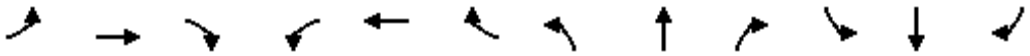
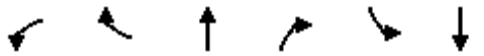


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	89	69	40	19	31	17	25	350	5	7	231	10
Future Volume (vph)	89	69	40	19	31	17	25	350	5	7	231	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	96	74	43	20	33	18	27	376	5	8	248	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	213	71	408	267
Volume Left (vph)	96	20	27	8
Volume Right (vph)	43	18	5	11
Hadj (s)	0.01	-0.04	0.06	0.08
Departure Headway (s)	5.9	6.1	5.3	5.5
Degree Utilization, x	0.35	0.12	0.60	0.41
Capacity (veh/h)	556	483	652	616
Control Delay (s)	11.9	10.0	15.7	12.2
Approach Delay (s)	11.9	10.0	15.7	12.2
Approach LOS	B	A	C	B

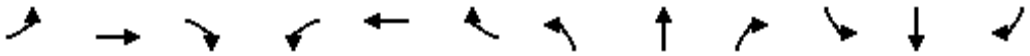
Intersection Summary				
Delay	13.5			
Level of Service	B			
Intersection Capacity Utilization	59.3%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	88	9	6	133
Future Volume (Veh/h)	0	0	88	9	6	133
Sign Control	Free		Stop			Stop
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	104	11	7	156
Pedestrians	18		29			87
Lane Width (ft)	0.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	0		2			7
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	29		116	47	168	116
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	29		116	47	168	116
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		85	99	99	78
cM capacity (veh/h)	1546		701	997	601	701

Direction, Lane #	NB 1	SB 1
Volume Total	115	163
Volume Left	0	7
Volume Right	11	0
cSH	721	696
Volume to Capacity	0.16	0.23
Queue Length 95th (ft)	14	23
Control Delay (s)	10.9	11.7
Lane LOS	B	B
Approach Delay (s)	10.9	11.7
Approach LOS	B	B

Intersection Summary			
Average Delay	11.4		
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	49	30	88	50	44	10	51	17	6	23	7
Future Volume (vph)	6	49	30	88	50	44	10	51	17	6	23	7
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	7	58	35	104	59	52	12	60	20	7	27	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	100	215	92	42
Volume Left (vph)	7	104	12	7
Volume Right (vph)	35	52	20	8
Hadj (s)	-0.16	-0.01	-0.07	-0.02
Departure Headway (s)	4.3	4.3	4.6	4.7
Degree Utilization, x	0.12	0.26	0.12	0.05
Capacity (veh/h)	800	798	730	702
Control Delay (s)	7.9	8.8	8.2	8.0
Approach Delay (s)	7.9	8.8	8.2	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	38.7%	ICU Level of Service	A	
Analysis Period (min)	15			

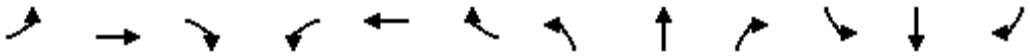
J. Intersection Capacity Analysis – Future conditions with the development (2030 Total Future)

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	35	444	875	1491
v/c Ratio	0.08	0.51	0.46	1.04
Control Delay	26.9	32.1	9.1	54.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.9	32.1	9.1	54.9
Queue Length 50th (ft)	16	123	121	~543
Queue Length 95th (ft)	40	172	162	#680
Internal Link Dist (ft)		782	130	228
Turn Bay Length (ft)	60			
Base Capacity (vph)	436	877	1921	1432
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.08	0.51	0.46	1.04

Intersection Summary

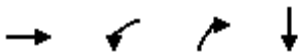
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	391	13	0	0	0	0	608	188	127	1229	0
Future Volume (vph)	32	391	13	0	0	0	0	608	188	127	1229	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						3.5			3.5	
Lane Util. Factor	1.00	0.95						0.95			0.95	
Frpb, ped/bikes	1.00	1.00						1.00			1.00	
Flpb, ped/bikes	1.00	1.00						1.00			1.00	
Frt	1.00	1.00						0.96			1.00	
Flt Protected	0.95	1.00						1.00			1.00	
Satd. Flow (prot)	1533	3074						2955			3170	
Flt Permitted	0.95	1.00						1.00			0.70	
Satd. Flow (perm)	1533	3074						2955			2240	
Peak-hour factor, PHF	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.90
Adj. Flow (vph)	35	430	14	0	0	0	0	668	207	140	1351	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	0	0
Lane Group Flow (vph)	35	442	0	0	0	0	0	846	0	0	1491	0
Confl. Peds. (#/hr)			22									
Heavy Vehicles (%)	6%	5%	7%	2%	2%	2%	2%	7%	3%	2%	2%	2%
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		8						2			6	
Permitted Phases	8									6		
Actuated Green, G (s)	26.5	26.5						62.0			62.0	
Effective Green, g (s)	28.5	28.5						64.0			64.0	
Actuated g/C Ratio	0.28	0.28						0.64			0.64	
Clearance Time (s)	6.0	6.0						5.5			5.5	
Lane Grp Cap (vph)	436	876						1891			1433	
v/s Ratio Prot		c0.14						0.29				
v/s Ratio Perm	0.02										c0.67	
v/c Ratio	0.08	0.50						0.45			1.04	
Uniform Delay, d1	26.2	29.9						9.1			18.0	
Progression Factor	1.00	1.00						1.00			1.00	
Incremental Delay, d2	0.4	2.1						0.8			35.0	
Delay (s)	26.5	31.9						9.8			53.0	
Level of Service	C	C						A			D	
Approach Delay (s)		31.5			0.0			9.8			53.0	
Approach LOS		C			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

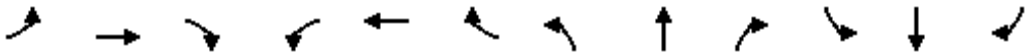


Lane Group	EBT	WBL	NBR	SBT
Lane Group Flow (vph)	765	927	254	2
v/c Ratio	0.80	1.08	0.27	0.02
Control Delay	42.3	83.8	5.5	54.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	42.3	83.8	5.5	54.0
Queue Length 50th (ft)	273	~727	22	2
Queue Length 95th (ft)	355	#1122	75	11
Internal Link Dist (ft)	649			121
Turn Bay Length (ft)				
Base Capacity (vph)	953	855	924	85
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.80	1.08	0.27	0.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

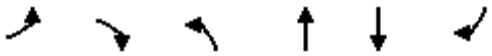
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	572	124	844	0	0	0	0	231	1	1	0
Future Volume (vph)	0	572	124	844	0	0	0	0	231	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	11	12	14	12	14	12	12	12
Total Lost time (s)		4.0		4.0					4.0		4.0	
Lane Util. Factor		0.95		1.00					1.00		1.00	
Frpb, ped/bikes		0.98		1.00					1.00		1.00	
Flpb, ped/bikes		1.00		1.00					1.00		1.00	
Frt		0.97		1.00					0.86		1.00	
Flt Protected		1.00		0.95					1.00		0.98	
Satd. Flow (prot)		2748		1540					1517		1472	
Flt Permitted		1.00		0.95					1.00		0.98	
Satd. Flow (perm)		2748		1540					1517		1472	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	629	136	927	0	0	0	0	254	1	1	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	0	750	0	927	0	0	0	0	166	0	2	0
Confl. Peds. (#/hr)	3		32	32		3	10					10
Heavy Vehicles (%)	2%	3%	5%	2%	2%	2%	2%	2%	4%	2%	2%	2%
Parking (#/hr)	0	0									0	0
Turn Type		NA		Prot					Prot	Perm	NA	
Protected Phases		4		6					2		3	
Permitted Phases										3		
Actuated Green, G (s)		39.0		61.0					61.0		2.0	
Effective Green, g (s)		41.0		63.0					63.0		4.0	
Actuated g/C Ratio		0.34		0.52					0.52		0.03	
Clearance Time (s)		6.0		6.0					6.0		6.0	
Vehicle Extension (s)		1.0		1.0					1.0		1.0	
Lane Grp Cap (vph)		938		808					796		49	
v/s Ratio Prot		c0.27		c0.60					0.11			
v/s Ratio Perm											0.00	
v/c Ratio		0.80		1.15					0.21		0.04	
Uniform Delay, d1		35.8		28.5					15.2		56.1	
Progression Factor		1.00		1.00					1.00		1.00	
Incremental Delay, d2		7.1		80.6					0.6		0.1	
Delay (s)		42.9		109.1					15.8		56.3	
Level of Service		D		F					B		E	
Approach Delay (s)		42.9			109.1			15.8			56.3	
Approach LOS		D			F			B			E	

Intersection Summary			
HCM 2000 Control Delay	70.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

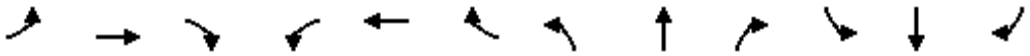
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	7	17	748	1368	76
Future Volume (Veh/h)	5	7	17	748	1368	76
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	7	18	787	1440	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				336	431	
pX, platoon unblocked	0.74	0.70	0.70			
vC, conflicting volume	1910	760	1520			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	0	875			
tC, single (s)	7.0	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.6	3.4	2.2			
p0 queue free %	97	99	97			
cM capacity (veh/h)	168	737	534			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	280	525	960	560
Volume Left	5	18	0	0	0
Volume Right	7	0	0	0	80
cSH	305	534	1700	1700	1700
Volume to Capacity	0.04	0.03	0.31	0.56	0.33
Queue Length 95th (ft)	3	3	0	0	0
Control Delay (s)	17.3	1.2	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	17.3	0.4		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		



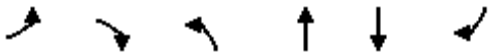
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	1	0	0	0	1	756	7	8	1330	5
Future Volume (Veh/h)	2	1	1	0	0	0	1	756	7	8	1330	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	2	1	1	0	0	0	1	796	7	8	1400	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								205			562	
pX, platoon unblocked	0.77	0.77	0.72	0.77	0.77	0.90	0.72			0.90		
vC, conflicting volume	1818	2224	702	1519	2222	402	1405			803		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	896	1425	0	504	1424	128	777			572		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	100	100	100	100	100			99		
cM capacity (veh/h)	178	102	778	339	102	813	599			902		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	399	405	708	705
Volume Left	2	1	0	8	0
Volume Right	1	0	7	0	5
cSH	179	599	1700	902	1700
Volume to Capacity	0.02	0.00	0.24	0.01	0.41
Queue Length 95th (ft)	2	0	0	1	0
Control Delay (s)	25.5	0.1	0.0	0.2	0.0
Lane LOS	D	A		A	
Approach Delay (s)	25.5	0.0		0.1	
Approach LOS	D				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	57.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	NBT	SBT
Lane Group Flow (vph)	819	1470
v/c Ratio	0.42	0.77
Control Delay	2.8	20.8
Queue Delay	0.2	0.5
Total Delay	3.0	21.3
Queue Length 50th (ft)	25	412
Queue Length 95th (ft)	32	510
Internal Link Dist (ft)	68	125
Turn Bay Length (ft)		
Base Capacity (vph)	1961	1902
Starvation Cap Reductn	384	139
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.52	0.83

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	25	753	1287	109
Future Volume (vph)	0	0	25	753	1287	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)				3.5	3.5	
Lane Util. Factor				0.95	0.95	
Frt				1.00	0.99	
Flt Protected				1.00	1.00	
Satd. Flow (prot)				3090	3120	
Flt Permitted				0.87	1.00	
Satd. Flow (perm)				2692	3120	
Peak-hour factor, PHF	0.90	0.90	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	26	793	1355	115
RTOR Reduction (vph)	0	0	0	0	5	0
Lane Group Flow (vph)	0	0	0	819	1465	0
Heavy Vehicles (%)	2%	2%	4%	5%	3%	2%
Turn Type			pm+pt	NA	NA	
Protected Phases			5	2	6	
Permitted Phases			2			
Actuated Green, G (s)				84.0	71.0	
Effective Green, g (s)				86.0	73.0	
Actuated g/C Ratio				0.72	0.61	
Clearance Time (s)				5.5	5.5	
Lane Grp Cap (vph)				1960	1898	
v/s Ratio Prot				c0.03	c0.47	
v/s Ratio Perm				0.27		
v/c Ratio				0.42	0.77	
Uniform Delay, d1				6.9	17.4	
Progression Factor				0.31	1.00	
Incremental Delay, d2				0.6	3.1	
Delay (s)				2.8	20.5	
Level of Service				A	C	
Approach Delay (s)	0.0			2.8	20.5	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	76	784	1373
v/c Ratio	0.21	0.35	0.61
Control Delay	19.6	1.6	0.9
Queue Delay	0.0	0.3	0.4
Total Delay	19.6	1.9	1.3
Queue Length 50th (ft)	19	11	3
Queue Length 95th (ft)	61	24	3
Internal Link Dist (ft)	247	132	68
Turn Bay Length (ft)			
Base Capacity (vph)	358	2217	2260
Starvation Cap Reductn	0	731	402
Spillback Cap Reductn	0	19	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.21	0.53	0.74

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	42	737	0	0	1291
Future Volume (vph)	29	42	737	0	0	1291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		3.5			3.5
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	0.99		1.00			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1413		3094			3154
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1413		3094			3154
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.94
Adj. Flow (vph)	31	45	784	0	0	1373
RTOR Reduction (vph)	35	0	0	0	0	0
Lane Group Flow (vph)	41	0	784	0	0	1373
Confl. Peds. (#/hr)		1				
Heavy Vehicles (%)	10%	7%	5%	2%	2%	3%
Turn Type	Prot		NA			NA
Protected Phases	4		2			2
Permitted Phases						
Actuated Green, G (s)	25.5		84.0			84.0
Effective Green, g (s)	27.5		86.0			86.0
Actuated g/C Ratio	0.23		0.72			0.72
Clearance Time (s)	5.0		5.5			5.5
Lane Grp Cap (vph)	323		2217			2260
v/s Ratio Prot	c0.03		0.25			c0.44
v/s Ratio Perm						
v/c Ratio	0.13		0.35			0.61
Uniform Delay, d1	36.7		6.5			8.5
Progression Factor	1.00		0.18			0.01
Incremental Delay, d2	0.8		0.4			0.8
Delay (s)	37.5		1.6			0.9
Level of Service	D		A			A
Approach Delay (s)	37.5		1.6			0.9
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	2.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

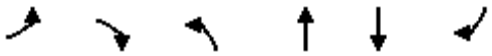
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	23	64	0
Future Volume (Veh/h)	0	0	0	23	64	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.90
Hourly flow rate (vph)	0	0	0	27	75	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	327					
pX, platoon unblocked						
vC, conflicting volume			0		27	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		27	0
tC, single (s)			4.1		6.5	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.6	3.3
p0 queue free %			100		92	100
cM capacity (veh/h)			1623		968	1085

Direction, Lane #	WB 1	NB 1
Volume Total	27	75
Volume Left	0	75
Volume Right	0	0
cSH	1700	968
Volume to Capacity	0.02	0.08
Queue Length 95th (ft)	0	6
Control Delay (s)	0.0	9.0
Lane LOS		A
Approach Delay (s)	0.0	9.0
Approach LOS		A

Intersection Summary			
Average Delay	6.6		
Intersection Capacity Utilization	13.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	104	57	715	1455
v/c Ratio	0.19	0.13	0.40	0.78
Control Delay	31.6	11.3	11.1	6.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.6	11.3	11.1	6.6
Queue Length 50th (ft)	59	5	130	63
Queue Length 95th (ft)	104	37	167	73
Internal Link Dist (ft)	705		607	132
Turn Bay Length (ft)		25		
Base Capacity (vph)	556	438	1801	1871
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	7	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.13	0.40	0.78

Intersection Summary



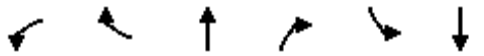
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	95	52	0	651	1324	0
Future Volume (vph)	95	52	0	651	1324	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	16	16	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frpb, ped/bikes	1.00	0.81		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1805	1313		2808	2916	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1805	1313		2808	2916	
Peak-hour factor, PHF	0.91	0.91	0.90	0.91	0.91	0.90
Adj. Flow (vph)	104	57	0	715	1455	0
RTOR Reduction (vph)	0	33	0	0	0	0
Lane Group Flow (vph)	104	24	0	715	1455	0
Confl. Peds. (#/hr)		109				
Heavy Vehicles (%)	2%	2%	2%	8%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	8			2	6	
Permitted Phases		8				
Actuated Green, G (s)	35.0	35.0		75.0	75.0	
Effective Green, g (s)	37.0	37.0		77.0	77.0	
Actuated g/C Ratio	0.31	0.31		0.64	0.64	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	556	404		1801	1871	
v/s Ratio Prot	c0.06			0.25	c0.50	
v/s Ratio Perm		0.02				
v/c Ratio	0.19	0.06		0.40	0.78	
Uniform Delay, d1	30.5	29.2		10.3	15.4	
Progression Factor	1.00	1.00		1.00	0.25	
Incremental Delay, d2	0.7	0.3		0.7	2.7	
Delay (s)	31.2	29.5		11.0	6.5	
Level of Service	C	C		B	A	
Approach Delay (s)	30.6			11.0	6.5	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

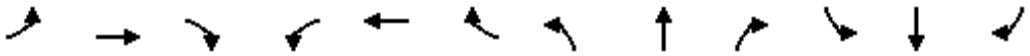
Lane Group	NBT	SBT
Lane Group Flow (vph)	780	1395
v/c Ratio	0.38	0.73
Control Delay	3.9	10.2
Queue Delay	0.2	0.6
Total Delay	4.0	10.9
Queue Length 50th (ft)	58	238
Queue Length 95th (ft)	69	318
Internal Link Dist (ft)	410	607
Turn Bay Length (ft)		
Base Capacity (vph)	2044	1912
Starvation Cap Reductn	441	140
Spillback Cap Reductn	0	205
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.49	0.82

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	644	105	71	1268
Future Volume (vph)	0	0	644	105	71	1268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10
Grade (%)	-10%		5%			-5%
Total Lost time (s)			3.0			3.0
Lane Util. Factor			0.95			0.95
Frt			0.98			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			2695			2984
Flt Permitted			1.00			0.85
Satd. Flow (perm)			2695			2533
Peak-hour factor, PHF	0.90	0.90	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	671	109	74	1321
RTOR Reduction (vph)	0	0	11	0	0	0
Lane Group Flow (vph)	0	0	769	0	0	1395
Heavy Vehicles (%)	2%	2%	7%	10%	2%	4%
Turn Type			NA		Perm	NA
Protected Phases			2			6
Permitted Phases					6	
Actuated Green, G (s)			81.0			81.0
Effective Green, g (s)			83.0			83.0
Actuated g/C Ratio			0.75			0.75
Clearance Time (s)			5.0			5.0
Vehicle Extension (s)			1.0			1.0
Lane Grp Cap (vph)			2033			1911
v/s Ratio Prot			0.29			
v/s Ratio Perm						c0.55
v/c Ratio			0.38			0.73
Uniform Delay, d1			4.6			7.4
Progression Factor			0.79			1.00
Incremental Delay, d2			0.4			2.5
Delay (s)			4.1			9.9
Level of Service			A			A
Approach Delay (s)	0.0		4.1			9.9
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



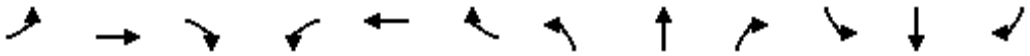
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	85	41	56	0	34	0	0	0	0	0	0
Future Volume (Veh/h)	41	85	41	56	0	34	0	0	0	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		-13%			-10%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.90	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	96	46	63	0	38	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	38	0	0	94	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	38	0	0	94	0	0	0			0		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	89	96	92	100	96	100			100		
cM capacity (veh/h)	914	894	1079	782	896	1085	1623			1623		

Direction, Lane #	EB 1	WB 1
Volume Total	188	101
Volume Left	46	63
Volume Right	46	38
cSH	938	874
Volume to Capacity	0.20	0.12
Queue Length 95th (ft)	19	10
Control Delay (s)	9.8	9.7
Lane LOS	A	A
Approach Delay (s)	9.8	9.7
Approach LOS	A	A

Intersection Summary				
Average Delay	9.7			
Intersection Capacity Utilization	16.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	77	27	375	747
v/c Ratio	0.50	0.24	0.37	0.58
Control Delay	50.6	44.3	4.2	9.6
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	50.6	44.3	4.5	9.6
Queue Length 50th (ft)	45	15	30	219
Queue Length 95th (ft)	96	44	81	313
Internal Link Dist (ft)	690	766	403	656
Turn Bay Length (ft)				
Base Capacity (vph)	153	112	1026	1291
Starvation Cap Reductn	0	0	210	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.24	0.46	0.58

Intersection Summary

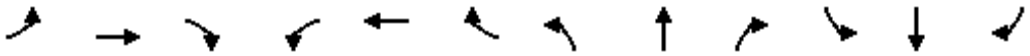


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	1	14	22	1	3	32	276	44	17	633	53
Future Volume (vph)	57	1	14	22	1	3	32	276	44	17	633	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	12	12	12	12	12	8	15	15	8
Grade (%)		-13%			6%			6%			0%	
Total Lost time (s)		5.0			5.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.89			1.00			0.99			1.00	
Flpb, ped/bikes		0.99			0.64			1.00			1.00	
Frt		0.97			0.98			0.98			0.99	
Flt Protected		0.96			0.96			1.00			1.00	
Satd. Flow (prot)		1283			924			1567			1815	
Flt Permitted		0.75			0.78			0.90			0.99	
Satd. Flow (perm)		1004			755			1423			1795	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	61	1	15	23	1	3	34	294	47	18	673	56
RTOR Reduction (vph)	0	8	0	0	3	0	0	5	0	0	3	0
Lane Group Flow (vph)	0	69	0	0	24	0	0	370	0	0	744	0
Confl. Peds. (#/hr)	3		158	158		3	8		10	10		8
Heavy Vehicles (%)	2%	2%	2%	9%	2%	2%	2%	3%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			6			2	
Permitted Phases	4			4			6			2		
Actuated Green, G (s)		14.0			14.0			77.0			77.0	
Effective Green, g (s)		16.0			16.0			79.0			79.0	
Actuated g/C Ratio		0.15			0.15			0.72			0.72	
Clearance Time (s)		7.0			7.0			6.0			6.0	
Lane Grp Cap (vph)		146			109			1021			1289	
v/s Ratio Prot												
v/s Ratio Perm		c0.07			0.03			0.26			c0.41	
v/c Ratio		0.47			0.22			0.36			0.58	
Uniform Delay, d1		43.1			41.5			5.9			7.5	
Progression Factor		1.00			1.00			0.58			1.00	
Incremental Delay, d2		10.7			4.7			0.9			1.9	
Delay (s)		53.8			46.2			4.3			9.4	
Level of Service		D			D			A			A	
Approach Delay (s)		53.8			46.2			4.3			9.4	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	169	211	37	15	252	75	41	814
v/c Ratio	0.38	0.59	0.11	0.05	0.26	0.11	0.08	0.42
Control Delay	32.5	39.8	9.4	9.0	10.3	2.3	9.0	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	39.8	9.4	9.0	10.3	2.3	9.0	11.3
Queue Length 50th (ft)	93	125	0	4	75	0	11	140
Queue Length 95th (ft)	155	208	24	13	117	17	26	181
Internal Link Dist (ft)	139	246			167			404
Turn Bay Length (ft)			100	110		100	95	
Base Capacity (vph)	447	358	345	276	987	700	498	1950
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.59	0.11	0.05	0.26	0.11	0.08	0.42

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	117	1	70	130	35	14	239	71	39	698	75
Future Volume (vph)	43	117	1	70	130	35	14	239	71	39	698	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	9	9	12	12	12	10	12	10
Grade (%)		-1%			3%			0%			-3%	
Total Lost time (s)		4.0			4.0	4.0	3.5	3.5	3.5	3.5	3.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		1.00			1.00	0.85	1.00	1.00	0.82	1.00	1.00	
Flpb, ped/bikes		0.98			0.98	1.00	0.97	1.00	1.00	0.90	1.00	
Frt		1.00			1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99			0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1611			1348	1021	1436	1598	1087	1336	3144	
Flt Permitted		0.87			0.83	1.00	0.30	1.00	1.00	0.57	1.00	
Satd. Flow (perm)		1427			1145	1021	447	1598	1087	806	3144	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	45	123	1	74	137	37	15	252	75	41	735	79
RTOR Reduction (vph)	0	0	0	0	0	25	0	0	29	0	7	0
Lane Group Flow (vph)	0	169	0	0	211	12	15	252	46	41	807	0
Confl. Peds. (#/hr)	49		48	48		49	31		35	35		31
Heavy Vehicles (%)	2%	3%	2%	7%	9%	7%	10%	7%	10%	4%	3%	2%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		32.5			32.5	32.5	66.0	66.0	66.0	66.0	66.0	
Effective Green, g (s)		34.5			34.5	34.5	68.0	68.0	68.0	68.0	68.0	
Actuated g/C Ratio		0.31			0.31	0.31	0.62	0.62	0.62	0.62	0.62	
Clearance Time (s)		6.0			6.0	6.0	5.5	5.5	5.5	5.5	5.5	
Lane Grp Cap (vph)		447			359	320	276	987	671	498	1943	
v/s Ratio Prot								0.16			c0.26	
v/s Ratio Perm		0.12			c0.18	0.01	0.03		0.04	0.05		
v/c Ratio		0.38			0.59	0.04	0.05	0.26	0.07	0.08	0.42	
Uniform Delay, d1		29.4			31.8	26.2	8.3	9.5	8.4	8.4	10.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.4			6.9	0.2	0.4	0.6	0.2	0.3	0.7	
Delay (s)		31.8			38.7	26.4	8.7	10.1	8.6	8.8	11.4	
Level of Service		C			D	C	A	B	A	A	B	
Approach Delay (s)		31.8			36.8			9.7			11.3	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

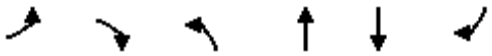
Lane Group	EBL	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	212	53	630	1076	213
v/c Ratio	0.70	0.38	0.65	1.21	0.38
Control Delay	48.4	18.9	8.6	123.6	2.8
Queue Delay	0.0	0.0	0.8	0.0	0.0
Total Delay	48.4	18.9	9.4	123.6	2.8
Queue Length 50th (ft)	124	8	90	~938	7
Queue Length 95th (ft)	#228	m11	m133	#1194	m21
Internal Link Dist (ft)	494		293	410	
Turn Bay Length (ft)		125			
Base Capacity (vph)	302	139	970	886	556
Starvation Cap Reductn	0	0	122	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.38	0.74	1.21	0.38

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

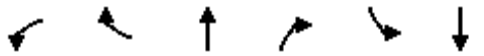
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	139	69	52	617	1054	209
Future Volume (vph)	139	69	52	617	1054	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	10	10	10	10
Grade (%)	4%			3%	-5%	
Total Lost time (s)	3.0		3.0	3.0	3.0	3.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	0.89		1.00	1.00	1.00	0.63
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1212		1370	1483	1573	862
Flt Permitted	0.97		0.06	1.00	1.00	1.00
Satd. Flow (perm)	1212		89	1483	1573	862
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	142	70	53	630	1076	213
RTOR Reduction (vph)	16	0	0	0	0	71
Lane Group Flow (vph)	196	0	53	630	1076	142
Confl. Peds. (#/hr)		93	58			58
Heavy Vehicles (%)	10%	10%	9%	6%	4%	2%
Turn Type	Prot		pm+pt	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases			2			6
Actuated Green, G (s)	24.0		70.0	70.0	60.0	60.0
Effective Green, g (s)	26.0		72.0	72.0	62.0	62.0
Actuated g/C Ratio	0.24		0.65	0.65	0.56	0.56
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	286		139	970	886	485
v/s Ratio Prot	c0.16		0.02	c0.42	c0.68	
v/s Ratio Perm			0.22			0.16
v/c Ratio	0.69		0.38	0.65	1.21	0.29
Uniform Delay, d1	38.3		46.2	11.4	24.0	12.5
Progression Factor	1.00		0.59	0.57	0.68	0.40
Incremental Delay, d2	12.6		4.2	1.8	103.6	1.0
Delay (s)	50.9		31.6	8.3	120.0	6.0
Level of Service	D		C	A	F	A
Approach Delay (s)	50.9			10.1	101.1	
Approach LOS	D			B	F	

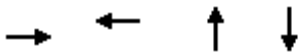
Intersection Summary			
HCM 2000 Control Delay	67.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	53	0	0	0	15	60
Future Volume (vph)	53	0	0	0	15	60
Peak Hour Factor	0.91	0.90	0.90	0.90	0.91	0.91
Hourly flow rate (vph)	58	0	0	0	16	66

Direction, Lane #	WB 1	SB 1
Volume Total (vph)	58	82
Volume Left (vph)	58	16
Volume Right (vph)	0	0
Hadj (s)	0.27	0.11
Departure Headway (s)	4.4	4.1
Degree Utilization, x	0.07	0.09
Capacity (veh/h)	808	846
Control Delay (s)	7.7	7.6
Approach Delay (s)	7.7	7.6
Approach LOS	A	A

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	14.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	115	3	422	688
v/c Ratio	0.63	0.01	0.52	0.59
Control Delay	40.6	31.7	3.0	6.2
Queue Delay	0.0	0.0	0.9	0.0
Total Delay	40.6	31.7	3.9	6.2
Queue Length 50th (ft)	43	1	18	95
Queue Length 95th (ft)	#121	9	m6	117
Internal Link Dist (ft)	696	244	287	403
Turn Bay Length (ft)				
Base Capacity (vph)	183	233	813	1161
Starvation Cap Reductn	0	0	175	1
Spillback Cap Reductn	0	0	0	20
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.63	0.01	0.66	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1	58	1	1	1	115	279	3	1	510	135
Future Volume (vph)	49	1	58	1	1	1	115	279	3	1	510	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			6%			-8%	
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.70			0.86			1.00			0.92	
Flpb, ped/bikes		0.76			0.88			0.97			1.00	
Frt		0.93			0.95			1.00			0.97	
Flt Protected		0.98			0.98			0.99			1.00	
Satd. Flow (prot)		811			1203			1536			1546	
Flt Permitted		0.88			0.95			0.70			1.00	
Satd. Flow (perm)		727			1164			1091			1545	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	52	1	62	1	1	1	122	297	3	1	543	144
RTOR Reduction (vph)	0	38	0	0	1	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	77	0	0	2	0	0	422	0	0	679	0
Confl. Peds. (#/hr)	158		191	191		158	81		112	112		81
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	10%	2%	3%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		20.0			20.0			80.0			80.0	
Effective Green, g (s)		22.0			22.0			82.0			82.0	
Actuated g/C Ratio		0.20			0.20			0.75			0.75	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		145			232			813			1151	
v/s Ratio Prot												
v/s Ratio Perm		c0.11			0.00			0.39			c0.44	
v/c Ratio		0.53			0.01			0.52			0.59	
Uniform Delay, d1		39.4			35.3			5.8			6.4	
Progression Factor		1.00			1.00			0.18			0.68	
Incremental Delay, d2		13.1			0.1			1.9			1.9	
Delay (s)		52.5			35.3			2.9			6.2	
Level of Service		D			D			A			A	
Approach Delay (s)		52.5			35.3			2.9			6.2	
Approach LOS		D			D			A			A	

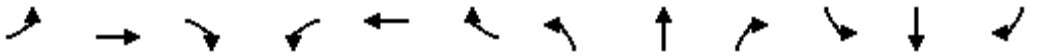
Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	25	784	277	282	958
v/c Ratio	0.08	0.84	0.35	0.91	0.87
Control Delay	26.0	21.5	9.1	24.4	5.6
Queue Delay	0.0	1.9	0.8	0.0	18.8
Total Delay	26.0	23.4	9.8	24.4	24.3
Queue Length 50th (ft)	9	382	54	61	51
Queue Length 95th (ft)	32	#573	98	m36	m35
Internal Link Dist (ft)	265	279			293
Turn Bay Length (ft)			100	125	
Base Capacity (vph)	305	934	802	309	1107
Starvation Cap Reductn	0	59	271	0	169
Spillback Cap Reductn	0	0	0	0	1
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.90	0.52	0.91	1.02

Intersection Summary

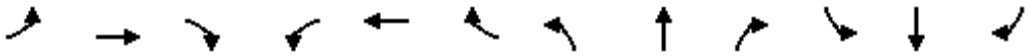
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	3	9	0	0	0	2	712	252	257	866	6
Future Volume (vph)	13	3	9	0	0	0	2	712	252	257	866	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	12	10	12	10	10	10	10	12
Grade (%)		0%			0%			2%			-3%	
Total Lost time (s)		3.5						3.5	3.5	3.0	3.5	
Lane Util. Factor		1.00						1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes		0.88						1.00	1.00	1.00	1.00	
Frt		0.95						1.00	0.85	1.00	1.00	
Flt Protected		0.97						1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1367						1491	1279	1480	1542	
Flt Permitted		0.97						1.00	1.00	0.21	1.00	
Satd. Flow (perm)		1367						1489	1279	326	1542	
Peak-hour factor, PHF	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.91	0.91	0.91	0.91	1.00
Adj. Flow (vph)	13	3	9	0	0	0	2	782	277	282	952	6
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	18	0	0	0	0	0	784	277	282	958	0
Confl. Peds. (#/hr)	93											
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	6%	5%	4%	5%	2%
Turn Type	Perm	NA					Perm	NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4						2		2	6		
Actuated Green, G (s)		22.0						67.0	67.0	77.0	77.0	
Effective Green, g (s)		24.0						69.0	69.0	79.0	79.0	
Actuated g/C Ratio		0.22						0.63	0.63	0.72	0.72	
Clearance Time (s)		5.5						5.5	5.5	5.0	5.5	
Vehicle Extension (s)		1.0						1.0	1.0	1.0	1.0	
Lane Grp Cap (vph)		298						934	802	307	1107	
v/s Ratio Prot										c0.06	0.62	
v/s Ratio Perm		0.01						0.53	0.22	c0.60		
v/c Ratio		0.06						0.84	0.35	0.92	0.87	
Uniform Delay, d1		34.1						16.1	9.8	14.8	11.5	
Progression Factor		1.00						0.81	0.81	2.73	0.30	
Incremental Delay, d2		0.4						7.2	0.9	5.2	0.9	
Delay (s)		34.5						20.3	8.8	45.5	4.4	
Level of Service		C						C	A	D	A	
Approach Delay (s)		34.5			0.0			17.3			13.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	108.6%	ICU Level of Service	G
Analysis Period (min)	15		

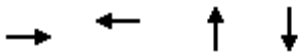
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	413	27	0	0	0	0	0	4	40	70	0
Future Volume (Veh/h)	0	413	27	0	0	0	0	0	4	40	70	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.90
Hourly flow rate (vph)	0	486	32	0	0	0	0	0	5	47	82	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		339			770							
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	0			518			543	502	502	507	518	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			507			532	491	491	496	507	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.0	3.3
p0 queue free %	100			100			100	100	99	90	82	100
cM capacity (veh/h)	1623			1046			391	473	571	467	462	1085

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	518	5	129
Volume Left	0	0	47
Volume Right	32	5	0
cSH	1700	571	464
Volume to Capacity	0.30	0.01	0.28
Queue Length 95th (ft)	0	1	28
Control Delay (s)	0.0	11.4	15.7
Lane LOS		B	C
Approach Delay (s)	0.0	11.4	15.7
Approach LOS		B	C

Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			



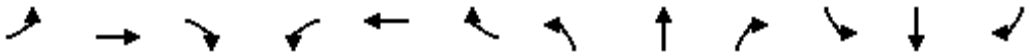
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	296	204	252	634
v/c Ratio	1.03	0.75	0.29	0.68
Control Delay	95.2	43.4	4.7	12.5
Queue Delay	0.0	0.0	2.8	0.9
Total Delay	95.2	43.4	7.5	13.4
Queue Length 50th (ft)	~217	93	0	184
Queue Length 95th (ft)	m#324	#216	1	235
Internal Link Dist (ft)	690	359	289	287
Turn Bay Length (ft)				
Base Capacity (vph)	286	271	878	929
Starvation Cap Reductn	0	0	507	106
Spillback Cap Reductn	0	0	0	17
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.03	0.75	0.68	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

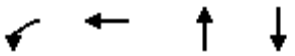
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	99	55	97	0	88	0	210	19	43	534	0
Future Volume (vph)	116	99	55	97	0	88	0	210	19	43	534	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	14	14	14	11	11	8	11	11	8
Grade (%)		0%			0%			5%			-8%	
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.93			0.72			0.95			1.00	
Flpb, ped/bikes		0.90			1.00			1.00			0.98	
Frt		0.97			0.94			0.99			1.00	
Flt Protected		0.98			0.97			1.00			1.00	
Satd. Flow (prot)		1186			1112			1480			1632	
Flt Permitted		0.77			0.67			1.00			0.96	
Satd. Flow (perm)		927			766			1480			1573	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.90	0.91	0.90	0.91	0.91	0.91	0.91	0.90
Adj. Flow (vph)	127	109	60	107	0	97	0	231	21	47	587	0
RTOR Reduction (vph)	0	8	0	0	42	0	0	3	0	0	0	0
Lane Group Flow (vph)	0	288	0	0	162	0	0	249	0	0	634	0
Confl. Peds. (#/hr)	191		75	75		191			159	159		
Heavy Vehicles (%)	10%	3%	6%	10%	2%	6%	2%	2%	5%	8%	2%	2%
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4						2		
Actuated Green, G (s)		31.0			31.0			63.0			63.0	
Effective Green, g (s)		33.0			33.0			65.0			65.0	
Actuated g/C Ratio		0.30			0.30			0.59			0.59	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		278			229			874			929	
v/s Ratio Prot								0.17				
v/s Ratio Perm		c0.31			0.21						c0.40	
v/c Ratio		1.03			0.71			0.29			0.68	
Uniform Delay, d1		38.5			34.2			11.1			15.4	
Progression Factor		0.99			1.00			0.37			0.56	
Incremental Delay, d2		58.4			16.8			0.7			3.4	
Delay (s)		96.6			51.1			4.7			12.1	
Level of Service		F			D			A			B	
Approach Delay (s)		96.6			51.1			4.7			12.1	
Approach LOS		F			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



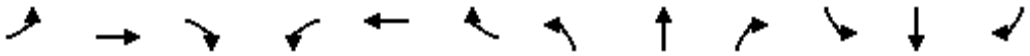
Lane Group	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	271	308	713	907
v/c Ratio	1.04	0.59	0.67	0.81
Control Delay	111.6	13.4	11.3	5.2
Queue Delay	0.0	0.4	22.9	49.1
Total Delay	111.6	13.9	34.2	54.3
Queue Length 50th (ft)	~208	31	245	29
Queue Length 95th (ft)	#377	101	m149	m70
Internal Link Dist (ft)		302	370	279
Turn Bay Length (ft)				
Base Capacity (vph)	260	518	1068	1119
Starvation Cap Reductn	0	0	369	44
Spillback Cap Reductn	0	36	183	294
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.04	0.64	1.02	1.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

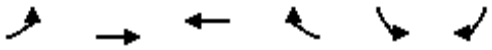
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	260	7	289	4	681	0	0	858	13
Future Volume (vph)	0	0	0	260	7	289	4	681	0	0	858	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	12	10	12	10	10	10	10	12
Grade (%)		0%			1%			1%			-2%	
Total Lost time (s)				3.0	3.0			3.5			3.5	
Lane Util. Factor				1.00	1.00			1.00			1.00	
Frpb, ped/bikes				1.00	0.93			1.00			1.00	
Flpb, ped/bikes				0.84	1.00			1.00			1.00	
Frt				1.00	0.85			1.00			1.00	
Flt Protected				0.95	1.00			1.00			1.00	
Satd. Flow (prot)				1193	1296			1484			1548	
Flt Permitted				0.95	1.00			1.00			1.00	
Satd. Flow (perm)				1193	1296			1479			1548	
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	1.00	0.96	1.00	0.96	0.90	0.90	0.96	1.00
Adj. Flow (vph)	0	0	0	271	7	301	4	709	0	0	894	13
RTOR Reduction (vph)	0	0	0	0	235	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	271	73	0	0	713	0	0	906	0
Confl. Peds. (#/hr)				50		17						
Heavy Vehicles (%)	2%	2%	2%	6%	0%	4%	0%	7%	2%	2%	4%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			6	
Permitted Phases				4			2					
Actuated Green, G (s)				22.0	22.0			77.5			77.5	
Effective Green, g (s)				24.0	24.0			79.5			79.5	
Actuated g/C Ratio				0.22	0.22			0.72			0.72	
Clearance Time (s)				5.0	5.0			5.5			5.5	
Lane Grp Cap (vph)				260	282			1068			1118	
v/s Ratio Prot					0.06						c0.59	
v/s Ratio Perm				c0.23				0.48				
v/c Ratio				1.04	0.26			0.67			0.81	
Uniform Delay, d1				43.0	35.6			8.2			10.2	
Progression Factor				1.06	1.71			1.26			0.17	
Incremental Delay, d2				66.8	2.2			0.3			3.2	
Delay (s)				112.2	63.2			10.6			4.9	
Level of Service				F	E			B			A	
Approach Delay (s)		0.0			86.1			10.6			4.9	
Approach LOS		A			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.5
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	425	3	0	95
Future Volume (Veh/h)	0	0	425	3	0	95
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.87	1.00	0.90	0.87
Hourly flow rate (vph)	0	0	489	3	0	109
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		382	771			
pX, platoon unblocked						
vC, conflicting volume	492				490	490
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	492				490	490
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	81
cM capacity (veh/h)	1071				537	572

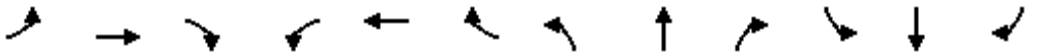
Direction, Lane #	WB 1	SB 1
Volume Total	492	109
Volume Left	0	0
Volume Right	3	109
cSH	1700	572
Volume to Capacity	0.29	0.19
Queue Length 95th (ft)	0	17
Control Delay (s)	0.0	12.8
Lane LOS		B
Approach Delay (s)	0.0	12.8
Approach LOS		B

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	NBT	SBT	SBR
Lane Group Flow (vph)	269	406	315
v/c Ratio	0.60	0.58	0.43
Control Delay	39.9	15.9	1.7
Queue Delay	0.0	1.9	0.5
Total Delay	39.9	17.8	2.2
Queue Length 50th (ft)	162	166	1
Queue Length 95th (ft)	252	m218	m5
Internal Link Dist (ft)	301	289	
Turn Bay Length (ft)			110
Base Capacity (vph)	447	705	741
Starvation Cap Reductn	0	164	155
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.60	0.75	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	12	235	9	16	370	299
Future Volume (vph)	0	0	0	0	0	0	12	235	9	16	370	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	14	14	14	14	14	14	10	10	8	10	10	10
Grade (%)		0%			0%			2%			-4%	
Total Lost time (s)								3.0			3.0	3.0
Lane Util. Factor								1.00			1.00	1.00
Frt								1.00			1.00	0.85
Flt Protected								1.00			1.00	1.00
Satd. Flow (prot)								1533			1575	1331
Flt Permitted								1.00			0.98	1.00
Satd. Flow (perm)								1533			1551	1331
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0	13	247	9	17	389	315
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	0	137
Lane Group Flow (vph)	0	0	0	0	0	0	0	268	0	0	406	178
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	4%	2%	10%	6%	3%	4%
Turn Type							Split	NA		Perm	NA	Perm
Protected Phases							2	2			4	
Permitted Phases										4		4
Actuated Green, G (s)								30.0			48.0	48.0
Effective Green, g (s)								32.0			50.0	50.0
Actuated g/C Ratio								0.29			0.45	0.45
Clearance Time (s)								5.0			5.0	5.0
Lane Grp Cap (vph)								445			705	605
v/s Ratio Prot								c0.17				
v/s Ratio Perm											c0.26	0.13
v/c Ratio								0.60			0.58	0.29
Uniform Delay, d1								33.5			22.2	18.9
Progression Factor								1.00			0.60	0.11
Incremental Delay, d2								5.9			2.3	0.8
Delay (s)								39.4			15.6	2.9
Level of Service								D			B	A
Approach Delay (s)		0.0			0.0			39.4			10.0	
Approach LOS		A			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

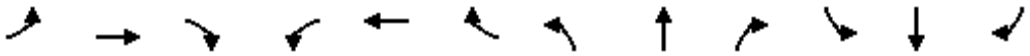
Lane Group	EBT	NBT	SBT	SBR
Lane Group Flow (vph)	142	731	1022	191
v/c Ratio	0.44	1.61	1.04	0.23
Control Delay	28.1	305.7	52.2	3.6
Queue Delay	0.0	0.0	23.8	0.0
Total Delay	28.1	305.7	75.9	3.6
Queue Length 50th (ft)	59	~697	~801	11
Queue Length 95th (ft)	122	m#733	m#985	m21
Internal Link Dist (ft)	191	200	370	
Turn Bay Length (ft)				150
Base Capacity (vph)	324	453	983	817
Starvation Cap Reductn	0	0	117	0
Spillback Cap Reductn	0	0	7	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.44	1.61	1.18	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

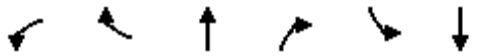
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	0	57	0	0	0	56	609	0	0	930	174
Future Volume (vph)	72	0	57	0	0	0	56	609	0	0	930	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	10	10	10	10	10	10
Grade (%)		3%			-1%			1%			-2%	
Total Lost time (s)		3.5						4.0			4.0	4.0
Lane Util. Factor		1.00						1.00			1.00	1.00
Frpb, ped/bikes		0.97						1.00			1.00	0.92
Flpb, ped/bikes		0.91						1.00			1.00	1.00
Frt		0.94						1.00			1.00	0.85
Flt Protected		0.97						1.00			1.00	1.00
Satd. Flow (prot)		1181						1494			1535	1209
Flt Permitted		0.84						0.47			1.00	1.00
Satd. Flow (perm)		1025						707			1535	1209
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	79	0	63	0	0	0	62	669	0	0	1022	191
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	0	0	43
Lane Group Flow (vph)	0	116	0	0	0	0	0	731	0	0	1022	148
Confl. Peds. (#/hr)	50		13	13		50	22		46	46		22
Heavy Vehicles (%)	6%	0%	10%	0%	0%	0%	4%	6%	0%	0%	5%	4%
Turn Type	Perm	NA				Perm	Perm	NA	Perm		NA	Perm
Protected Phases		8			4			2			6	
Permitted Phases	8			4		4	2		2	6		6
Actuated Green, G (s)		30.0						68.5			68.5	68.5
Effective Green, g (s)		32.0						70.5			70.5	70.5
Actuated g/C Ratio		0.29						0.64			0.64	0.64
Clearance Time (s)		5.5						6.0			6.0	6.0
Lane Grp Cap (vph)		298						453			983	774
v/s Ratio Prot											0.67	
v/s Ratio Perm		c0.11						c1.03				0.12
v/c Ratio		0.39						1.61			1.04	0.19
Uniform Delay, d1		31.2						19.8			19.8	8.1
Progression Factor		1.00						1.36			0.93	1.00
Incremental Delay, d2		3.8						281.3			32.0	0.3
Delay (s)		35.0						308.1			50.4	8.4
Level of Service		C						F			D	A
Approach Delay (s)		35.0			0.0			308.1			43.8	
Approach LOS		C			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	135.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	664	0	0	986
Future Volume (Veh/h)	0	0	664	0	0	986
Sign Control	Stop		Free			Free
Grade	0%		1%			-2%
Peak Hour Factor	0.90	0.90	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	699	0	0	1038
Pedestrians			13			13
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			259			280
pX, platoon unblocked	0.49	0.76			0.76	
vC, conflicting volume	1750	712			699	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	921	466			449	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	147	450			855	

Direction, Lane #	NB 1	SB 1
Volume Total	699	1038
Volume Left	0	0
Volume Right	0	0
cSH	1700	855
Volume to Capacity	0.41	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

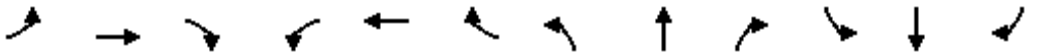
Lane Group	EBT	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	464	1023	352	363	550	65
v/c Ratio	0.39	0.88	1.01	0.86	0.73	0.11
Control Delay	22.8	39.7	91.8	31.6	18.8	5.8
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.0
Total Delay	22.8	39.7	91.8	31.6	20.2	5.8
Queue Length 50th (ft)	115	342	~252	143	162	5
Queue Length 95th (ft)	158	#475	#444	m139	m158	m6
Internal Link Dist (ft)	189	477	172		179	
Turn Bay Length (ft)				100		160
Base Capacity (vph)	1198	1157	349	422	753	617
Starvation Cap Reductn	0	0	0	0	77	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.88	1.01	0.86	0.81	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

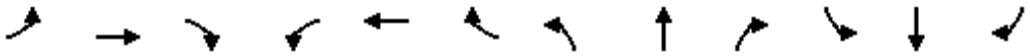
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	402	53	0	708	295	0	343	2	356	539	64
Future Volume (vph)	0	402	53	0	708	295	0	343	2	356	539	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	10	10	10	10	10
Grade (%)		1%			1%			2%			-2%	
Total Lost time (s)		4.0			4.0			4.0		3.0	4.0	4.0
Lane Util. Factor		0.95			0.95			1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			0.98			1.00		1.00	1.00	0.88
Flpb, ped/bikes		1.00			1.00			1.00		1.00	1.00	1.00
Frt		0.98			0.96			1.00		1.00	1.00	0.85
Flt Protected		1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)		2805			2709			1325		1501	1507	1177
Flt Permitted		1.00			1.00			1.00		0.23	1.00	1.00
Satd. Flow (perm)		2805			2709			1325		362	1507	1177
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	410	54	0	722	301	0	350	2	363	550	65
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	29
Lane Group Flow (vph)	0	464	0	0	1023	0	0	352	0	363	550	37
Confl. Peds. (#/hr)	13		26	26		13	64		251	251		64
Heavy Vehicles (%)	2%	8%	10%	2%	9%	7%	2%	7%	10%	2%	7%	3%
Parking (#/hr)								0	0			
Turn Type		NA			NA			NA		pm+pt	NA	Perm
Protected Phases		6			2			8		7	4	
Permitted Phases										4		4
Actuated Green, G (s)		45.0			45.0			27.0		53.0	53.0	53.0
Effective Green, g (s)		47.0			47.0			29.0		55.0	55.0	55.0
Actuated g/C Ratio		0.43			0.43			0.26		0.50	0.50	0.50
Clearance Time (s)		6.0			6.0			6.0		5.0	6.0	6.0
Lane Grp Cap (vph)		1198			1157			349		419	753	588
v/s Ratio Prot		0.17			c0.38			c0.27		c0.18	0.37	
v/s Ratio Perm										0.25		0.03
v/c Ratio		0.39			0.88			1.01		0.87	0.73	0.06
Uniform Delay, d1		21.6			29.0			40.5		20.9	21.7	14.2
Progression Factor		1.00			1.00			1.00		1.43	0.81	1.22
Incremental Delay, d2		0.9			10.0			50.4		2.4	0.6	0.0
Delay (s)		22.6			39.0			90.9		32.5	18.0	17.3
Level of Service		C			D			F		C	B	B
Approach Delay (s)		22.6			39.0			90.9			23.3	
Approach LOS		C			D			F			C	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

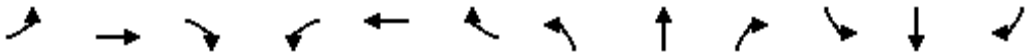
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	172	49	62	2	739	0	0	1237	13
Future Volume (Veh/h)	0	0	0	172	49	62	2	739	0	0	1237	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.94	0.94	0.90	0.90	0.94	0.94
Hourly flow rate (vph)	0	0	0	183	52	66	2	786	0	0	1316	14
Pedestrians											22	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								557			210	
pX, platoon unblocked	0.73	0.73	0.69	0.73	0.73	0.92	0.69			0.92		
vC, conflicting volume	1834	2113	665	1448	2120	415	1330			786		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	904	1287	0	374	1296	190	574			593		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	55	55	91	100			100		
cM capacity (veh/h)	98	118	746	406	117	740	685			900		

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	301	264	524	877	453
Volume Left	183	2	0	0	0
Volume Right	66	0	0	0	14
cSH	305	685	1700	1700	1700
Volume to Capacity	0.99	0.00	0.31	0.52	0.27
Queue Length 95th (ft)	259	0	0	0	0
Control Delay (s)	85.9	0.1	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	85.9	0.0		0.0	
Approach LOS	F				

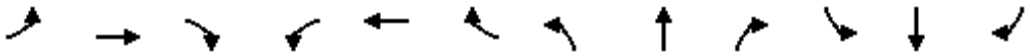
Intersection Summary				
Average Delay	10.7			
Intersection Capacity Utilization	63.2%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	14	33	4	10	47	158	5	161	8	108	192	11
Future Volume (vph)	14	33	4	10	47	158	5	161	8	108	192	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	36	4	11	51	172	5	175	9	117	209	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	55	234	189	117	221
Volume Left (vph)	15	11	5	117	0
Volume Right (vph)	4	172	9	0	12
Hadj (s)	0.04	-0.35	0.08	0.53	0.12
Departure Headway (s)	5.7	5.0	5.4	6.1	5.6
Degree Utilization, x	0.09	0.32	0.28	0.20	0.35
Capacity (veh/h)	559	666	633	568	612
Control Delay (s)	9.3	10.4	10.4	9.3	10.4
Approach Delay (s)	9.3	10.4	10.4	10.0	
Approach LOS	A	B	B	B	

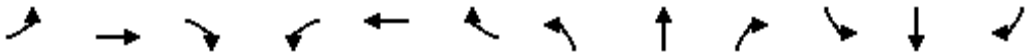
Intersection Summary				
Delay	10.2			
Level of Service	B			
Intersection Capacity Utilization	50.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	2	62	7	11	50	24	4	209	48	16	110	3
Future Volume (vph)	2	62	7	11	50	24	4	209	48	16	110	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	2	67	8	12	54	26	4	225	52	17	118	3

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	92	281	138
Volume Left (vph)	2	12	4	17
Volume Right (vph)	8	26	52	3
Hadj (s)	-0.01	-0.11	0.01	0.16
Departure Headway (s)	5.0	4.9	4.5	4.8
Degree Utilization, x	0.11	0.13	0.35	0.19
Capacity (veh/h)	648	666	767	703
Control Delay (s)	8.6	8.6	10.0	8.9
Approach Delay (s)	8.6	8.6	10.0	8.9
Approach LOS	A	A	A	A

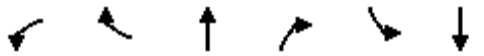
Intersection Summary				
Delay	9.3			
Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	4	7	5	19	116	23	67	242	2	6	302	62
Future Volume (vph)	4	7	5	19	116	23	67	242	2	6	302	62
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	4	8	5	20	125	25	72	260	2	6	325	67

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	17	170	334	398
Volume Left (vph)	4	20	72	6
Volume Right (vph)	5	25	2	67
Hadj (s)	-0.03	-0.02	0.09	-0.02
Departure Headway (s)	6.1	5.7	5.1	4.9
Degree Utilization, x	0.03	0.27	0.47	0.54
Capacity (veh/h)	484	566	682	709
Control Delay (s)	9.2	10.8	12.5	13.5
Approach Delay (s)	9.2	10.8	12.5	13.5
Approach LOS	A	B	B	B

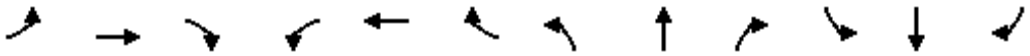
Intersection Summary				
Delay	12.6			
Level of Service	B			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	166	4	11	41
Future Volume (Veh/h)	0	0	166	4	11	41
Sign Control	Free		Stop			Stop
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	178	4	12	44
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		0	0	93	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		0	0	93	0
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		80	100	98	95
cM capacity (veh/h)	1623		896	1085	752	896

Direction, Lane #	NB 1	SB 1
Volume Total	182	56
Volume Left	0	12
Volume Right	4	0
cSH	899	861
Volume to Capacity	0.20	0.07
Queue Length 95th (ft)	19	5
Control Delay (s)	10.0	9.5
Lane LOS	B	A
Approach Delay (s)	10.0	9.5
Approach LOS	B	A

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	16.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	23	0	49	0	80	95	40	35	0
Future Volume (vph)	0	0	0	23	0	49	0	80	95	40	35	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	26	0	54	0	89	106	44	39	0

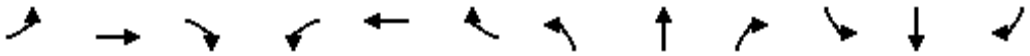
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	0	80	195	83
Volume Left (vph)	0	26	0	44
Volume Right (vph)	0	54	106	0
Hadj (s)	0.00	-0.26	-0.29	0.15
Departure Headway (s)	4.6	4.2	3.9	4.4
Degree Utilization, x	0.00	0.09	0.21	0.10
Capacity (veh/h)	745	791	901	782
Control Delay (s)	7.6	7.7	7.9	7.9
Approach Delay (s)	0.0	7.7	7.9	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay	7.9		
Level of Service	A		
Intersection Capacity Utilization	30.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	53	579	1346	805
v/c Ratio	0.09	0.48	0.81	0.91dl
Control Delay	20.2	24.3	22.4	25.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	20.2	24.3	22.4	25.9
Queue Length 50th (ft)	21	140	333	206
Queue Length 95th (ft)	47	191	432	298
Internal Link Dist (ft)		782	130	228
Turn Bay Length (ft)	60			
Base Capacity (vph)	613	1198	1672	1012
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.09	0.48	0.81	0.80

Intersection Summary

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

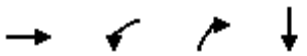


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	511	62	0	0	0	0	1011	322	84	713	0
Future Volume (vph)	52	511	62	0	0	0	0	1011	322	84	713	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						3.5			3.5	
Lane Util. Factor	1.00	0.95						0.95			0.95	
Frpb, ped/bikes	1.00	0.99						1.00			1.00	
Flpb, ped/bikes	1.00	1.00						1.00			1.00	
Frt	1.00	0.98						0.96			1.00	
Flt Protected	0.95	1.00						1.00			0.99	
Satd. Flow (prot)	1593	3088						3040			3114	
Flt Permitted	0.95	1.00						1.00			0.60	
Satd. Flow (perm)	1593	3088						3040			1875	
Peak-hour factor, PHF	0.99	0.99	0.99	0.90	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.90
Adj. Flow (vph)	53	516	63	0	0	0	0	1021	325	85	720	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	30	0	0	0	0
Lane Group Flow (vph)	53	570	0	0	0	0	0	1316	0	0	805	0
Confl. Peds. (#/hr)			36									
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	2%	3%	3%	2%	4%	2%
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		8						2			6	
Permitted Phases	8									6		
Actuated Green, G (s)	36.5	36.5						52.0			52.0	
Effective Green, g (s)	38.5	38.5						54.0			54.0	
Actuated g/C Ratio	0.38	0.38						0.54			0.54	
Clearance Time (s)	6.0	6.0						5.5			5.5	
Lane Grp Cap (vph)	613	1188						1641			1012	
v/s Ratio Prot		c0.18						c0.43				
v/s Ratio Perm	0.03										0.43	
v/c Ratio	0.09	0.48						0.80			0.91dl	
Uniform Delay, d1	19.6	23.2						18.7			18.5	
Progression Factor	1.00	1.00						1.00			1.00	
Incremental Delay, d2	0.3	1.4						4.2			6.5	
Delay (s)	19.8	24.6						22.9			25.0	
Level of Service	B	C						C			C	
Approach Delay (s)		24.2			0.0			22.9			25.0	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

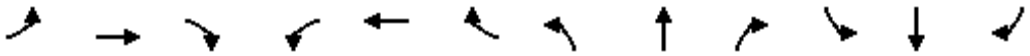
c Critical Lane Group



Lane Group	EBT	WBL	NBR	SBT
Lane Group Flow (vph)	945	368	566	2
v/c Ratio	0.91	0.45	0.62	0.02
Control Delay	49.0	20.8	16.8	54.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	49.0	20.8	16.8	54.0
Queue Length 50th (ft)	358	155	175	2
Queue Length 95th (ft)	#488	282	354	11
Internal Link Dist (ft)	649			121
Turn Bay Length (ft)				
Base Capacity (vph)	1041	816	910	110
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.91	0.45	0.62	0.02

Intersection Summary

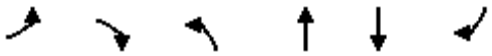
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	755	105	335	0	0	0	0	515	1	1	0
Future Volume (vph)	0	755	105	335	0	0	0	0	515	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	11	12	14	12	14	12	12	12
Total Lost time (s)		4.0		4.0					4.0		4.0	
Lane Util. Factor		0.95		1.00					1.00		1.00	
Frpb, ped/bikes		0.99		1.00					1.00		1.00	
Flpb, ped/bikes		1.00		1.00					1.00		1.00	
Frt		0.98		1.00					0.86		1.00	
Flt Protected		1.00		0.95					1.00		0.98	
Satd. Flow (prot)		2816		1540					1547		1472	
Flt Permitted		1.00		0.95					1.00		0.98	
Satd. Flow (perm)		2816		1540					1547		1472	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	830	115	368	0	0	0	0	566	1	1	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	97	0	0	0
Lane Group Flow (vph)	0	936	0	368	0	0	0	0	469	0	2	0
Confl. Peds. (#/hr)	1		13	13		1	16					16
Heavy Vehicles (%)	2%	3%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)	0	0									0	0
Turn Type		NA		Prot					Prot	Perm	NA	
Protected Phases		4		6					2		3	
Permitted Phases										3		
Actuated Green, G (s)		42.0		58.0					58.0		2.0	
Effective Green, g (s)		44.0		60.0					60.0		4.0	
Actuated g/C Ratio		0.37		0.50					0.50		0.03	
Clearance Time (s)		6.0		6.0					6.0		6.0	
Vehicle Extension (s)		1.0		1.0					1.0		1.0	
Lane Grp Cap (vph)		1032		770					773		49	
v/s Ratio Prot		c0.33		0.24					c0.30			
v/s Ratio Perm											0.00	
v/c Ratio		0.91		0.48					0.61		0.04	
Uniform Delay, d1		36.1		19.7					21.5		56.1	
Progression Factor		1.00		1.00					1.00		1.00	
Incremental Delay, d2		13.0		2.1					3.5		0.1	
Delay (s)		49.1		21.8					25.1		56.3	
Level of Service		D		C					C		E	
Approach Delay (s)		49.1			21.8			25.1			56.3	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

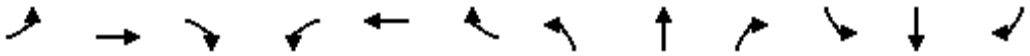
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	15	119	13	1156	806	31
Future Volume (Veh/h)	15	119	13	1156	806	31
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	16	127	14	1230	857	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				336	431	
pX, platoon unblocked	0.88	0.87	0.87			
vC, conflicting volume	1516	445	890			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	634	54	567			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	85	98			
cM capacity (veh/h)	356	869	868			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	143	424	820	571	319
Volume Left	16	14	0	0	0
Volume Right	127	0	0	0	33
cSH	748	868	1700	1700	1700
Volume to Capacity	0.19	0.02	0.48	0.34	0.19
Queue Length 95th (ft)	18	1	0	0	0
Control Delay (s)	10.9	0.5	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	10.9	0.2		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		



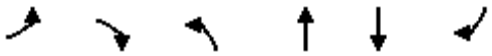
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	3	0	0	0	1	1154	22	7	920	1
Future Volume (Veh/h)	2	1	3	0	0	0	1	1154	22	7	920	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	2	1	3	0	0	0	1	1215	23	7	968	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								205			562	
pX, platoon unblocked	0.87	0.87	0.88	0.87	0.87	0.81	0.88			0.81		
vC, conflicting volume	1592	2222	484	1730	2212	619	969			1238		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	771	1498	152	930	1485	58	700			823		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	100	100	100	100	100			99		
cM capacity (veh/h)	249	104	766	189	106	806	788			650		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	608	630	491	485
Volume Left	2	1	0	7	0
Volume Right	3	0	23	0	1
cSH	278	788	1700	650	1700
Volume to Capacity	0.02	0.00	0.37	0.01	0.29
Queue Length 95th (ft)	2	0	0	1	0
Control Delay (s)	18.2	0.0	0.0	0.3	0.0
Lane LOS	C	A		A	
Approach Delay (s)	18.2	0.0		0.2	
Approach LOS	C				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	47.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	NBT	SBT
Lane Group Flow (vph)	1240	980
v/c Ratio	0.66	0.51
Control Delay	4.5	14.5
Queue Delay	0.0	0.0
Total Delay	4.5	14.5
Queue Length 50th (ft)	48	212
Queue Length 95th (ft)	37	264
Internal Link Dist (ft)	68	125
Turn Bay Length (ft)		
Base Capacity (vph)	1881	1907
Starvation Cap Reductn	2	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.66	0.51

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	57	1146	901	49
Future Volume (vph)	0	0	57	1146	901	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)				3.5	3.5	
Lane Util. Factor				0.95	0.95	
Frt				1.00	0.99	
Flt Protected				1.00	1.00	
Satd. Flow (prot)				3147	3131	
Flt Permitted				0.84	1.00	
Satd. Flow (perm)				2642	3131	
Peak-hour factor, PHF	0.90	0.90	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	59	1181	929	51
RTOR Reduction (vph)	0	0	0	0	3	0
Lane Group Flow (vph)	0	0	0	1240	977	0
Heavy Vehicles (%)	2%	2%	3%	3%	3%	2%
Turn Type			pm+pt	NA	NA	
Protected Phases			5	2	6	
Permitted Phases			2			
Actuated Green, G (s)				82.0	71.0	
Effective Green, g (s)				84.0	73.0	
Actuated g/C Ratio				0.70	0.61	
Clearance Time (s)				5.5	5.5	
Lane Grp Cap (vph)				1880	1904	
v/s Ratio Prot				c0.04	0.31	
v/s Ratio Perm				c0.42		
v/c Ratio				0.66	0.51	
Uniform Delay, d1				10.0	13.4	
Progression Factor				0.28	1.00	
Incremental Delay, d2				1.6	1.0	
Delay (s)				4.4	14.4	
Level of Service				A	B	
Approach Delay (s)	0.0			4.4	14.4	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	78	1183	911
v/c Ratio	0.21	0.55	0.41
Control Delay	20.6	7.8	0.5
Queue Delay	0.0	0.1	0.1
Total Delay	20.6	7.9	0.6
Queue Length 50th (ft)	22	87	1
Queue Length 95th (ft)	64	101	1
Internal Link Dist (ft)	247	132	68
Turn Bay Length (ft)			
Base Capacity (vph)	380	2165	2207
Starvation Cap Reductn	0	145	340
Spillback Cap Reductn	1	122	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.21	0.59	0.49

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	37	41	1171	0	0	902
Future Volume (vph)	37	41	1171	0	0	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		3.5			3.5
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	0.99		1.00			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.93		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1420		3094			3154
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1420		3094			3154
Peak-hour factor, PHF	0.99	0.99	0.99	0.90	0.90	0.99
Adj. Flow (vph)	37	41	1183	0	0	911
RTOR Reduction (vph)	31	0	0	0	0	0
Lane Group Flow (vph)	47	0	1183	0	0	911
Confl. Peds. (#/hr)		2				
Heavy Vehicles (%)	10%	7%	5%	2%	2%	3%
Turn Type	Prot		NA			NA
Protected Phases	4		2			2
Permitted Phases						
Actuated Green, G (s)	27.5		82.0			82.0
Effective Green, g (s)	29.5		84.0			84.0
Actuated g/C Ratio	0.25		0.70			0.70
Clearance Time (s)	5.0		5.5			5.5
Lane Grp Cap (vph)	349		2165			2207
v/s Ratio Prot	c0.03		c0.38			0.29
v/s Ratio Perm						
v/c Ratio	0.13		0.55			0.41
Uniform Delay, d1	35.3		8.7			7.6
Progression Factor	1.00		0.78			0.01
Incremental Delay, d2	0.8		0.9			0.5
Delay (s)	36.1		7.7			0.5
Level of Service	D		A			A
Approach Delay (s)	36.1		7.7			0.5
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			